

REMARKS

By this amendment, claims 1, 4, 9–11, 13–16, 18, 24 and 26 are amended, claims 2, 3, 8, 12, 18, 27 and 28 are hereby canceled, and new claims 29–34 are hereby presented. Claims 1, 4–7, 9–11, 13–17, 19–26 and 29–34 are pending in the application. Further examination of the application, as amended, and favorable reconsideration of the objections and rejections are respectfully requested.

The drawings were objected to as allegedly failing to show the outlet surface of the body as recited in claims 5–6. The office action apparently overlooked that the outlet surface is referred to in the specification as “chamfered surface 15,” which is discussed at page 11, line 6 through page 12, line 4, among others. See Figs. 1 and 2. Withdrawal of the drawing objection is respectfully requested.

Claims 7–27 were objected to as allegedly being in improper form (multiple–multiple dependencies). The office action apparently referred to the claims in the international application and failed to consider the preliminary amendment filed August 30, 2006, upon national stage entry. The amendment revised claims 3, 10–12, 14–16, 18, 22–24 and 26 from the international application to conform to US PTO practice without presenting multiple dependent claims.

Therefore, the objection was improper and there was no valid basis for refusing to examine claims 7–27 on the merits. The objection should be withdrawn and all claims examined on the merits. Further, any rejection of the subject matter defined in original claims 7–27 should be non-final so that applicant receives due process: “a second or any subsequent action on the merits in any application or patent undergoing reexamination proceedings will not be made final if it includes a rejection, on newly cited art . . . of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art.” MPEP 706.07(a).

In this regard, claim 1 has been amended to incorporate the limitations of serially dependent claims 3, 8 and 12, which are hereby canceled, so that claim 1 currently is identical in scope to previously presented claim 12; and that claims 9, 10, 11 and 13 have only been amended to depend from claim 1 for consistency. These amendments should not precipitate any new ground of rejection, and thus upon the initial examination of these claims applicant is entitled to a non-final office action.

In addition to the amendments to claims 1, 9–11 and 13 just discussed, applicant has also presented new claim 29 which is similar to claim 1, and also includes some minor wording changes for clarity and affirmatively recites the utility of the nozzle as a hydrocarbon well-test flare nozzle to form a water wall around a flare in a hydrocarbon well-test operation. Support is found in

original claims 1, 3, 8 and 12, as well as the specification at page 2, lines 4–14; and page 3, lines 14–22 (minimal energy loss).

Claims 4–7 and 14–25 are amended to depend from or through claim 29. New claims 31–34 correspond to original claims 9–11 and 13, respectively, and also depend from new claim 29. Support for the subject matter of new claim 30 (approximately 105 degree angle) is found in the specification in the paragraph bridging pages 12 and 13. Finally kit claim 26 is amended to recite the feature of claim 27, which has been canceled, and also refers to the nozzle of claim 29. No new matter is presented.

Claims 1–6 and 28 were rejected as anticipated by Dey (US 3,029,030). The rejection is overcome by the present amendment and can be withdrawn. Dey fails to disclose or suggest a variable channel width or a self-cleaning mechanism for adjusting the width of the channel.

Moreover, Dey does not disclose a hydrocarbon well test flare nozzle, is not capable of forming a water wall and does not minimize energy loss as described in applicant's specification. At page 3, in the paragraph beginning at line 14, it is disclosed that the fluid deflector may serve to direct the fluid while minimizing energy loss when compared to a prior nozzle of the type where the fluid is thrown backwards onto a second directing surface which directs the fluid out of the nozzle. A benefit of the present nozzle is to minimize energy loss prior to reaching the deflecting surface. This is not achieved in Dey as the

fluid flowing through the channel 16A would lose energy upon impact with the neck 9 of the ferrule before going down one of the channels 12 or 17.

When faced with the problem of trying to achieve a water wall around a hydrocarbon well test flare, the skilled man would simply not look at a sprinkler nozzle. For background, the reason the present invention was conceived was the great structural strength of hydrocarbon well test flares. Previously, such flares were surrounded by a fine spray. The flare had little structural strength and would move in the breeze; however, the spray, which was also structurally weak, would also move with the flare in any breeze, so everything was fine. As flares became structurally stronger, however, the spray shield was inadequate. As the wind blew, the spray would move with the wind but the flare resisted it. This exposed the rig to heat which the spray shield was intended to prevent. The presently claimed nozzle provides a water wall which holds its position around the flare in windy conditions. Dey does not teach or suggest anything remotely equivalent.

Accordingly, it is respectfully submitted the application is in condition for allowance.

If any issues remain that are appropriate for resolution by telephone interview, please contact undersigned counsel.

Respectfully submitted,

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